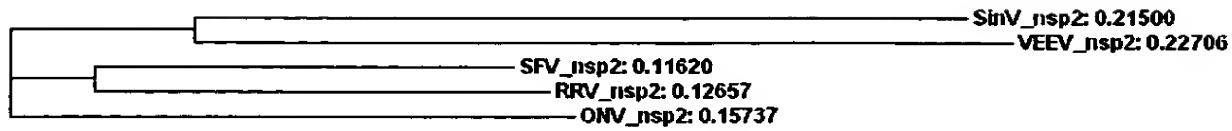
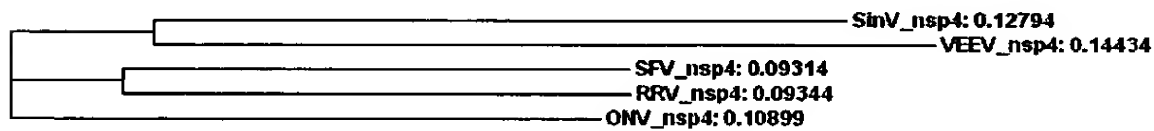


## b) Phylogenetic Tree

### nsp2



### nsp4



Phylogenetic tree of different alpha virus members. The amino acid sequences of O'nyong-nyong virus (ONV), Ross River virus (RRV), Semliki Forest virus (SFV), Sindbis virus (SinV) and Venezuelan equine encephalitis virus (VEEV) to estimate the phylogeny based on the NJ (Neighbour Joining) method of the non-structural protein P2 (nsp2) and non-structural protein P4 (nsp4). The branch lengths are proportional to the amount of inferred evolutionary change.